

**DEPARTMENT OF TRANSPORTATION****DIVISION OF ENGINEERING SERVICES**

Office of Structural Materials

Quality Assurance and Source Inspection



Bay Area Branch  
690 Walnut Ave.St. 150  
Vallejo, CA 94592-1133  
(707) 649-5453  
(707) 649-5493

Contract #: 04-0120F4Cty: SF/ALA Rte: 80 PM: 13.2/13.9File #: 1.28**WELDING INSPECTION REPORT****Resident Engineer:**Pursell, Gary**Address:** 333 Burma Road**City:** Oakland, CA 94607**Report No:** WIR-012769**Date Inspected:** 23-Mar-2010**Project Name:** SAS Superstructure**OSM Arrival Time:** 800**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**OSM Departure Time:** 1630**Contractor:** American Bridge/Fluor Enterprises, a JV**Location:** Job Site**CWI Name:** Listed below.**CWI Present:** Yes No**Inspected CWI report:** Yes No N/A**Rod Oven in Use:** Yes No N/A**Electrode to specification:** Yes No N/A**Weld Procedures Followed:** Yes No N/A**Qualified Welders:** Yes No N/A**Verified Joint Fit-up:** Yes No N/A**Approved Drawings:** Yes No N/A**Approved WPS:** Yes No N/A**Delayed / Cancelled:** Yes No N/A**Bridge No:** 34-0006**Component:** Orthotropic Box Girders (OBG)**Summary of Items Observed:**

The Quality Assurance Inspector (QAI), Scott Croff, was present at the Self Anchored Span (SAS) job site to observe the scheduled fabrication and welding of components for the SFOBB project. The following observations were made:

- 1) OBG L2E/L3E - field splice back gouging
- 2) OBG L1E/L2E - back welding

1) The QAI observed ABF personnel using plasma arc torches and grinders to remove the backing bars from the bottom of OBG L2E/L3E plate D field splice. The QAI observed that the plasma arc torch is set onto a semi-automatic track and is in the process of cutting through / gouging off the backing bars. See the attached photo. The QAI also observed ABF personnel back gouging and grinding the inside of edge plate B field splice, to prepare it for back welding. This work was in progress at the end of the work shift.

2) The QAI observed ABF personnel back welding plate D at L1E/L2E field splice. The QAI noted that this CJP weld is being completed after the backing bar has been removed. The QAI noted that the Quality Control (QC) Inspector Bernie Docena is monitoring this welding. The QAI noted that ABF personnel Jeremy Dolman, ID 5042 and Rory Hogan, ID 3186, making the welds with gas shielded flux cored arc welding (FCAW-G). The QAI was informed that after approximately 1000mm of welding, there was major porosity observed in the weld and the work was stopped. The QAI was informed that the weld will be removed by grinding and additional back gouging will be performed. The QAI was informed that the preheat temperature of the 35mm thick weld will not be maintained as the weld is being removed. The QAI noted that this work was in progress at the end of the shift.

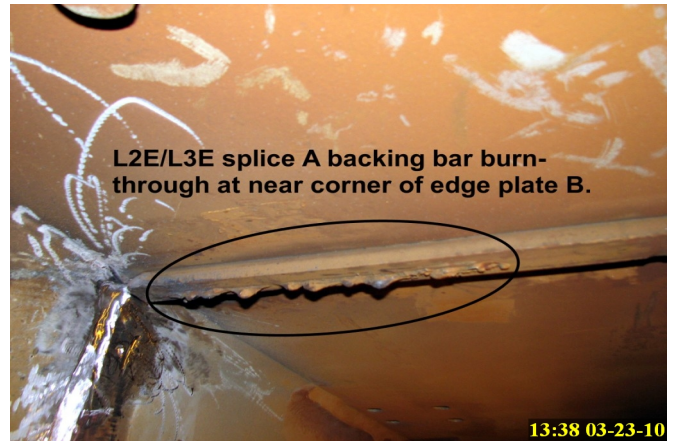
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The QAI accompanied the Structural Materials Representative (SMR) Behrouz Bozorgnia in the OBG structure and made observations of completed welds and backing bar conditions. The QAI assisted in photographing the typical conditions of the ends of the backing bar where deck plate A field splice intersects with the edge plates (B and F) and the backing bars appear to be cut short of the end of the weld. There were also observations of the backing bar's burned / melted condition. See the attached photo. These photos were relayed to the SMR and the QAI Bill Levell.



### Summary of Conversations:

As noted above, the QAI had general conversations with the QC Inspectors and ABF personnel regarding the work in progress. The QAI relayed the status of work and the observed backing bar conditions to the QAI Bill Levell. The QAI also generated a shift turn-over report with this information. There were no other notable observations or conversations during this shift.

### Comments

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact Mohammad Fatemi, (916)813-3677, who represents the Office of Structural Materials for your project.

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<b>Inspected By:</b>	Croff, Scott	Quality Assurance Inspector
<b>Reviewed By:</b>	Levell, Bill	QA Reviewer

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